16 Fall ---Inspection #1304211

A **50 year old male** was fatally injured when he fell approximately 42' from a roof while in the process of staging roofing materials. Employees had been working on the roof of this building for four days prior to the incident and 75% of the roof had been completed. This roof is 89 ft. x 67 ft. and has a pitch of 4/12. Fall protection was provided to the employees via full body harness, 6 ft. shock absorbing lanyard, and anchor points mounted to the structure. Attached to the anchor point was a 50 ft. synthetic rope lifeline equipped with a rope grab system and single snap hook that connected to the anchor point. The 50 ft. lifelines and roof anchors are left on the roof until the roofing activities are completed.

Employees access the roof using an aerial lift. Upon exiting the lift, employees connect to the nearest lifeline until they reached an anchor point/lifeline closer to their work area. Once they reached the anchor point nearest their work area, they connected to that 50 ft. lifeline and tossed the initial lifeline back to the edge of the roof for other employees to use when they accessed the roof.

On the day of the incident, the victim exited the aerial lift and traveled to his work area located in the middle section of the roof, within minutes of arriving to his work area, two employees on the roof heard him yell and witnessed him fall from the previously completed west side of the roof. Based on this information, it is believed that the victim was standing approximately 20- 25 feet away from the edge of the roof, near the ridge cap attempting to connect to an anchor point when he unintentionally stepped on the opposite side of the roof where the water shield (slick surface) had been applied the previous days, causing him to slip and fall from the eave on the west side of the roof onto the concrete loading dock and subsequently onto the ground below.

It was determined that the victim did not have his 6 ft. shock absorbing lanyard attached to his harness when he accessed the roof, therefore, was not able to properly connect into any of the lifelines positioned on the roof.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

<u>Citation 1 Item 1</u> Type of Violation: Serious \$2000

29 CFR 1926.453(b)(2)(vi): Boom and basket load limits specified by the manufacturer were exceeded:

In that three employees were lifted 38 ft. above the ground in a Genie brand aerial lift Model S-65 to access the Sludge Dewatering Building roof which exceeded the two person maximum platform capacity.

<u>Citation 1 Item 2</u> Type of Violation: Serious \$4000

29 CFR 1926.501(b)(10): Each employee engaged in roofing activities on low-slope roofs with unprotected sides and edges 6 feet or more above lower levels, was not protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system.

In that one employee, preparing to start roofing activities on a 89' x 6 7' low pitched (4:12) roof, was not utilizing all components of a personal fall arrest system while traveling from the roof edge to an anchor point installed on the roof when he fell 43 ft. to the ground below.

<u>Citation 1 Item 3</u> Type of Violation: Serious \$5400

29 CFR l 926.502(d)(15): Anchorage used for attachment for personal fall arrest equipment was not capable of supporting at least 5,000 pounds (22.2 kN) per employee attached nor was it designed, installed and uses as part of a complete personal fall arrest system which maintains a safety factor of at least two; and under the supervision of a qualified person.

In that the re-usable roof anchors (Falltech Reusable Wood Frame Structure Roof Anchor, Model#: 7410) used on the Sludge Dewatering Building's roof were not installed as directed by the manufacturer to ensure the anchors were capable of supporting 5,000 lbs.

<u>Citation 2 Item 1</u> **Type of Violation: Other-than-Serious** \$500

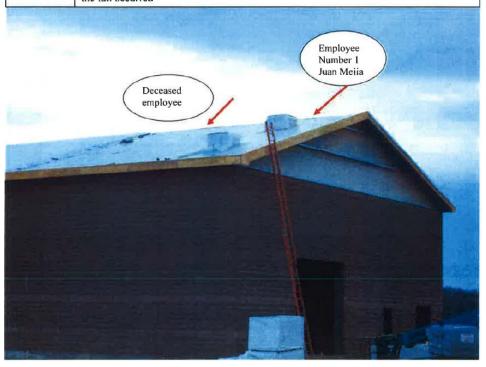
TDLWD Rule 0800-01-0 -.03(27 (b)(3): Each recordable injury or illness was not entered on the OSHA 300 Log and/or an incident report (OSHA Form 301 or equivalent) within seven (7) calendar days of receiving information that a recordable injury or illness has occurred:

In that a recordable injury that occurred on 23 March 2018 was not recorded on the OSHA 301 Injury and Illness Incident Report until 3 April 2018.

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Description:

East elevation of Sludge Dewatering Building, right section of the roof that had not been completed with insulation and water shield material. Arrows indicate the approximate location of the two employees that were on the roof, anchors were installed near the area where the arrows are pointing as described by the employee that was on the roof when the fall occurred



Description:

West elevation of the Sludge Dewatering Building, this is the side of the building where the employee fell from the roof

